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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/974,956 | 10/11/2001 | Masaru Hirata | 14990 | 7595 |
| 23389 | 7590 | 08/08/2005 | EXAMINER | |
| SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530 | | | HOQUE, NASRIN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2631 | |

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/974,956 | HIRATA, MASARU | |
| | Examiner | Art Unit | |
| | Nasrin Hoque | 2631 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 18 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Drawing is objected for not being labeling all the elements in FIG. 6. For example, element 20 (FIG. 6) should be labeled as "30" as specified in page 10 (specification provided by the applicant). Appropriate correction is required.

Abstract

2. Abstract is objected for following :
 - a. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The abstract exceeds the current limitation.

- b. It is suggested to replace (line 17) " section 5." with – section 5--.
- Appropriate correction is required

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claim 5 is rejected under 35 U.S.C. 102(a) as being unpatentable by admitted prior art of instant application (APA). Regarding claim 5, admitted prior art of instant application (APA) discloses that a mobile station on CDMA communication system involves a finger sections for spreading a radio wave(s) received via multi path (Fig 1, blocks/sections 20, 4, and 8, page 1, lines 1-28 and page 3, lines 1-5) which can support the following:

- a. Allocating a path timing corresponding to peak position of a detected received radio signal (Fig 1, blocks/sections 4, 8, and 9, Page 2, lines 26-29, page 3, line 1).
- b. The finger section decides the path tracking range (Fig 4, block /section 9, Page 4, lines 10-11).
- c. The radio waves are being inversely spread within the track range among segments positioned before and after path timing in finger sections (Fig 4, block /section 11, Page 4, line 6-9) and a path tracking range is allocated for fingers (page 4, lines 10-12).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1, 2,3, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of Easton et al. (US Patent No 5,764,687).

7. Regarding claims 1 and 2, APA discloses all the subject matters except the limitation of variable path tracking. APA discloses that a mobile station in CDMA communication system is composed of plurality of finger sections which receive plural radio waves from a base station and a finger allocation unit allocating a path timing corresponding to each of said plurality of finger sections, each of which being spread in path tracking range among segments positioned before and after path timing allocated by finger allocating section (APA: Fig 1, blocks 8, 9,10 and page 2, lines 6-26, page 3, line 1 and page 4, lines 10-12), except APA fails to teach that the path tracking range is variable in each of the finger section. Easton discloses that the tracking ranges can be varied because the peak from the correlator may move in time (Easton: Fig 1, column 3, lines 5-11 & lines 25-31 and Fig 3, block 122, column 9, lines 5-7). The references (APA and Easton) are analogous art because they are from same field of endeavor for CDMA communication system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate Easton's teaching in the APA so as to adaptively tracking the finger section.

8. Regarding claims 3, 4 and 6, APA discloses all the subject matters except the limitation of relationship between peak positions and relative distance. APA discloses that a for a multi-path scenario, a plurality of peaks of radio waves can be detected in a

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delay profile (APA :Fig 1, blocks/sections 4, 8 and 9, page 2, lines 23-25) and a path tracking range is allocated for fingers (APA : page 4, lines 10-12). Easton discloses that a one microsecond path delay corresponds to a differential path distance of approximately 300 meters (Easton : column 2, lines 9-11); therefore it is obvious that the range is related to the distance of peak positions for delayed set of signals.


Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nasrin Hoque whose telephone number is 571-272-5948. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600


Nasrin Hoque
Examiner
Art Unit 2631